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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/688,582	10/16/2000	Faruk S. Hadziomerovic	NORT-0068 [12403RRUS01U]	2017
7590	03/22/2004		EXAMINER FERRIS, DERRICK W	
Ruben S. Bains TROP, PRUNER & HU, P.C. 8554 Katy Freeway, Ste 100 Houston, TX 77024			ART UNIT 2663	PAPER NUMBER 3

DATE MAILED: 03/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/688,582

Applicant(s)

HADZIOMEROVIC, FARUK S.

Examiner

Derrick W. Ferris

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 16-34 is/are rejected.
- 7) ☒ Claim(s) 14 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 22-29, 32** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the term “the processor” lacks antecedent basis as recited in claims 22-29 (i.e., claim 21 recites a controller and a not a processor). For the purpose of making the anticipated or obviousness rejections below, the examiner assumes applicant meant processing in general. As to claim 32, see similar rejection above for claims 22-29.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-7, 9, 21-25, 28, 29, and 31-33** are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,754,543 to *Seid*.

As to **claim 1**, *Seid* discloses an invention for connectivity matrix-based multicast routing. In particular, *Seid* discloses solving the problem of handling two or more independent cost factors (e.g., see column 1, lines 59-62) by prioritizing a cost function (i.e., connectivity matrix) (see e.g., column 2, lines 54-63). The reference reads on the claims using a reasonable but broad interpretation where a first data structure is the

connectivity matrix associated with costs which is later used in conjunction with the shortest path matrix to find the shortest path between source and destination of a packet switched network. In particular, examiner assumes a reasonable but broad interpretation of combing a first data structure with itself. Specifically, see e.g., *Seid* column 4, lines 37-40.

As to **claim 2**, the second data structure is the shortest path matrix (although the second data structure could also be another cost function).

As to **claim 3**, see e.g., column 6, lines 50-60.

As to **claim 4**, see e.g., column 2, lines 7-24 and column 6, lines 35-45.

As to **claim 5**, see e.g., column 4, lines 46-57 with respect to min. function.

As to **claims 6, 7 and 9**, see e.g., column 2, lines 49-59.

As to **claims 21 and 22**, see combined rejections for claims 1-6.

As to **claim 23**, see similar rejection for claim 11.

As to **claim 24**, see similar rejection for claim 12.

As to **claim 25**, see similar rejection for claim 13.

As to **claim 28**, see similar rejection for claim 4.

As to **claim 29**, see similar rejection for claim 5.

As to **claims 31 and 32**, see similar rejection for claim 1.

As to **claim 33**, see combined rejections for claims 1-6.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2663

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 8, 30 and 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent No. 5,754,543 to *Seid* in view of "Internet Protocol DARPA Internet Program Protocol Specification" to *Information Sciences Institute*.

As to **claim 8**, *Seid* discloses using a packet in general but is silent or deficient to specifically using an IP packet (see e.g., column 1, lines 9-20).

Information Sciences Institute teaches the further recited limitation above at e.g., page 5.

Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to use IP as a packet. In particular, one skilled in the art would have been motivated to using an IP packet for communicating over an IP network where an IP network is a packet network.

As to **claim 30**, see similar rejection for claim 8.

As to **claim 34**, see similar rejection for claim 8.

7. **Claims 10-13 and 16-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,754,543 to *Seid* in view of U.S. Patent No. 6,400,681 to *Bertin et al.* ("*Bertin*").

As to **claim 10**, in addition to the rejections for claim 1 and claim 2, *Seid* may not be clear on the overall structure of a node as shown e.g., in figure 1. In particular, *Seid* may not clearly teach a storage device and a controller.

Bertin discloses the above-cited limitations in e.g., figure 3.

Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to provide a storage device for storing data structures and a route controller for combining and determining information. In particular, examiner notes that it would have been obvious to realize the functions as disclosed by *Seid* using generic components found in a router such as a storage device and a router controller. As further motivation and support, *Bertin* discloses in figure 3 a storage device 306,308 for storing data structure and a router controller 305 for making routing decisions. One would be motivated to use the structure shown in figure 3 of *Bertin* for high-speed packet switching such as for ATM or IP.

As to **claims 11 and 12**, see e.g., column 6, lines 35-60 of *Seid*.

As to **claim 13**, see e.g., column 1, lines 21-30 of *Seid*.

As to **claim 16**, see similar rejection for claim 4.

As to **claim 17**, see similar rejection for claim 5.

As to **claim 18**, see e.g., column 6, lines 35-60 of *Seid*.

As to **claim 19**, see similar rejection for claim 1.

8. **Claim 20** is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,754,543 to *Seid* in view of U.S. Patent No. 6,400,681 to *Bertin et al.* ("*Bertin*") in further view of "Internet Protocol DARPA Internet Program Protocol Specification" to *Information Sciences Institute*.

As to **claim 20**, see similar rejection for claim 8.

Allowable Subject Matter

Art Unit: 2663

9. **Claims 14-15** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. **Claims 26 and 27** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (703) 305-4225. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris
Examiner
Art Unit 2663


DWF


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 3/17/04